Giuliana E. Turi, Ph.D.

Curriculum Vitae

NOAA ESRL PSD
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Education

May 2010 – Jun. 2014 **Ph.D. in Ocean Science**, Environmental Physics group of Prof. Nicolas Gruber, ETH Zürich, Switzerland, Ph.D. work funded by ETH Zürich and the EU FP7 projects CarboChange and GeoCarbon, supervised by Prof. Nicolas Gruber and Dr. Zouhair Lachkar from ETH Zürich
Thesis title: *Modeling recent trends and variability in the oceanic carbon cycle of the California Current System*

Sep. 2007 – Jul. 2009 **M.Sc. in Atmospheric and Climate Science**, ETH Zürich, Switzerland, supervised by Prof. Martin Funk and Dr. Andreas Bauder from ETH Zürich
Minor in glaciology with elective courses and 1 week of field work on the Rhonegletscher to collect data for my thesis
Thesis title: *The short-term flow dynamics of the Rhonegletscher tongue*

Sep. 2004 – Aug. 2007 **B.Sc. in Physics**, University of Basel, Switzerland
Elective courses in astronomy

Sep. 2003 – Aug. 2004 **Study of Biology**, University of Basel, Switzerland
Elective courses in marine biology

Sep. 1997 – Jul. 2003 **A-levels**, Kollegium St. Fidelis, Stans, Switzerland
Elective courses in chemistry, physics, astronomy, music, Latin

Work and teaching experience

Since Feb. 2015 **Postdoctoral Research Associate**, NOAA/ESRL and CIRES, Boulder, USA

Jul. - Dec. 2014 **Postdoctoral researcher**, Environmental Physics group of Prof. Nicolas Gruber, ETH Zürich, Switzerland
Continuation of my Ph.D. work on modeling the carbon cycle of the California Current System

Sep. 2010 – Sep. 2013 **Teaching assistant**, Tutor for physics lab courses and for biogeochemistry seminars, grading of exams in linear algebra and systems analysis (all at B.Sc. level)

Sep. 2013 – Feb. 2014 **Co-supervisor**, Master thesis of Fabrice Lacroix, *The offshore transport of carbon in the California Current System: recent interannual variability and long-term trends*, Co-supervised with Prof. Nicolas Gruber and Dr. Zouhair Lachkar from ETH Zürich

Apr. 2012 **Co-organizer**, 5^{th} IBP Ph.D. congress of the Institute for Biogeochemistry and Pollutant Dynamics (IBP), ETH Zürich, Switzerland

Jun. 2009 – Sep. 2009 **Intern**, Environmental department of Pöyry Infra AG, Zürich, Switzerland
Assistance in conducting environmental assessments of ongoing national projects and in writing environmental assessment reports

Jan. 2005 – Aug. 2007 **Student research assistant**, Physics Institute of the University of Basel, Switzerland
Designing and maintenance of physics lab experiments and lab reports

Further education and training

Sep. 2013 – Feb. 2014 Analysis of Climate and Weather Data
Elective course in the context of my Ph.D. studies, 2 h per week

Sep. 2012 – Feb. 2013 Environmental Governance
Elective course in the context of my Ph.D. studies, 2 h per week

Aug. 2011 SOLAS summer school, Cargèse, France
Poster award, as voted for by the lecturers

Awards

Apr. 2012 13^{th} Swiss Global Change Day poster award (1,000 CHF of expenses for a scientific conference)

Aug. 2011 5^{th} SOLAS Summer School poster award (as voted for by the lecturers)

Languages

Native languages	English, Swiss German
Fluent written/spoken	German, Italian, French
Basic knowledge	Spanish

Computer literacy

Operating systems	Linux, Mac, Windows
Programming languages	MATLAB, NCL, NCO, Ferret, Fortran, Bash
Computer programs	Adobe Illustrator, LaTeX, MS Office

Peer-reviewed publications

2015 **G. Turi**, N. Gruber, Z. Lachkar, and M. Münnich. *Climatic modulation of recent trends in ocean acidification in the California Current System*, submitted to Environmental Research Letters

2015 R. Arruda, P. H. R. Calil, A. A. Bianchi, S. C. Doney, N. Gruber, I. Lima, and **G. Turi**. *Air-sea CO_2 fluxes and the controls on ocean surface pCO_2 variability in coastal and open-ocean southwestern Atlantic Ocean: A modeling study*, submitted to Biogeosciences Discussions

2014 **G. Turi**, Z. Lachkar, and N. Gruber. *Spatiotemporal variability and drivers of pCO_2 and air-sea CO_2 fluxes in the California Current System: an eddy-resolving modeling study*, Biogeosciences, 11(3): 671-690

Other publications

2014 **G. Turi**, Z. Lachkar, M. Münnich, N. Gruber, and D. Loher. *Recent climatic changes enhance ongoing ocean acidification in the California Current System*, Contribution to the IMBER Update Newsletter, Issue No. 27, September 2014

2014 **G. Turi**, Ph.D. thesis: *Modeling recent trends and variability in the oceanic carbon cycle of the California Current System*, Environmental Physics group, Institute for Biogeochemistry and Pollutant Dynamics, ETH Zürich, Switzerland

2012 S. Alin, S. Siedlecki, B. Hales, J. Mathis, W. Evans, M. Stukel, G. Gaxiola-Castro, J. M. Hernandez-Ayon, L. Juranek, M. Goñi, **G. Turi**, J. Needoba, E. Mayorga, Z. Lachkar, N. Gruber, J. Hartmann, N. Moosdorf, R. Feely, and F. Chavez. *Coastal Carbon Synthesis for the Continental Shelf of the North American Pacific Coast (NAPC): Preliminary Results*, Ocean Carbon and Biogeochemistry (OCB) newsletter, Volume 5, No. 1, Winter 2012

2009 **G. Turi**, Master thesis: *The short-term flow dynamics of the Rhonegletscher tongue*, Laboratory of Hydraulics, Hydrology and Glaciology, ETH Zürich, Switzerland

Presentations and posters

Mar. 2015	*Modeling recent trends and variability in the oceanic carbon cycle of the California Current System*, Institute of Arctic and Alpine Research, University of Colorado, Boulder (invited oral presentation)
Jun. 2014	*Recent climatic changes enhance ongoing ocean acidification in the California Current System*, IMBER Open Science Conference, Bergen, Norway (oral presentation)
Jun. 2014	*Less is more: The non-linear response of hypoxia to climate change in coastal upwelling systems*, IMBER Open Science Conference, Bergen, Norway (oral presentation, substitute for Dr. Zouhair Lachkar)
Feb. 2014	*Recent climatic changes enhance ongoing ocean acidification in the California Current System*, Ocean Sciences Meeting, Honolulu, USA (oral presentation)
Jun. 2013	*Carbon cycling in Eastern Boundary Upwelling Systems: insights from eddy-resolving modeling studies*, 9^{th} International Carbon Dioxide Conference, Beijing, China (poster)
Apr. 2013	*Changes in air-sea CO_2 fluxes in the California Current System from 1979-2011: an eddy-resolving modeling study*, CarboChange Annual Meeting, Norwich, United Kingdom (poster)
Apr. 2012	*The carbon budget of the California Upwelling System*, 13^{th} Swiss Global Change Day, Bern, Switzerland (poster)
Feb. 2012	*The carbon budget of the California Upwelling System*, Ocean Sciences Meeting, Salt Lake City, USA (oral presentation)
Apr. 2011	*Mesoscale Eddies and the coastal carbon cycling in the California Upwelling System*, EGU General Assembly, Vienna, Austria (oral presentation)
Apr. 2011	*Mesoscale Eddies and the coastal carbon cycling in the California Upwelling System*, 4^{th} IBP Ph.D. Congress, Eawag, Dübendorf, Switzerland (oral presentation)
May 2010 - Dec. 2014	Regular oral presentations of my work within the Environmental Physics group at ETH Zürich as part of a weekly seminar series
Oct. 2009	*The short-term flow dynamics of the Rhonegletscher tongue*, Institute of Low-Temperature Science, Hokkaido University, Sapporo, Japan (invited oral presentation)

Reviewing service

Journals include	Nature; Continental Shelf Research; Biogeosciences Discussions